CLAIMS

1. A compound represented by a formula [1]:

$$R^{1}$$
 $C = C$ R^{3} [1]

wherein R^1 and R^2 respectively represent a heavy or light hydrogen atom, R^3 represents a heavy or light hydrogen atom or a methyl group in which three hydrogen atoms are respectively heavy or light hydrogen atoms, R^4 represents a condensed ring group composed of a norbornane ring and a C_{5-7} hydrocarbon ring provided that at least one hydrogen atom contained in the condensed ring group is a heavy hydrogen atom.

- 2. The compound of claim 1, wherein the C_{5-7} hydrocarbon ring is a saturated hydrocarbon ring.
- 3. The compound of claim 1, wherein the C_{5-7} hydrocarbon ring is an unsaturated hydrocarbon ring.
- 4. The compound of claim 2, wherein the saturated hydrocarbon ring is selected from the group consisting of a cyclopentane ring, a cyclohexane ring and a norbornane ring.
- 5. The compound of claim 3, wherein the unsaturated hydrocarbon ring is selected from the group consisting of a cyclopentene ring, a cyclohexene ring and a norbornene ring.

6. The compound of any one of claims 1 to 5, wherein 20 % or more hydrogen atoms contained in the compound are heavy hydrogen atoms.

- 7. The compound of any one of claims 1 to 5, wherein 40 % or more hydrogen atoms contained in the compound are heavy hydrogen atoms.
- 8. The compound of any one of claims 1 to 7, wherein the total number of light hydrogen atoms contained in the compound is not greater than 15.
- 9. The compound of any one of claims 1 to 8, wherein 10 % or more hydrogen atoms contained in \mathbb{R}^4 are heavy hydrogen atoms.
- 10. The compound of any one of claims 1 to 9, wherein the total number of light hydrogen atoms contained in \mathbb{R}^4 is not greater than 12.
- 11. The compound of any one of claims 1 to 10, wherein R^4 is a tricyclo[5.2.1.0^{2,6}] decyl group, and at least one hydrogen atom contained in R^4 is a heavy hydrogen atom.
- 12. A process for producing a compound represented by a formula [1]:

wherein R^1 and R^2 respectively represent a heavy or light hydrogen atom, R^3 represents a heavy or light hydrogen atom or a methyl group in which three hydrogen atoms are respectively heavy or light hydrogen atoms, R^4 represents a condensed ring group composed of a norbornane ring and a C_{5-7} hydrocarbon ring provided that at least one hydrogen atom contained in the condensed ring group is a heavy hydrogen atom;

comprising reacting an alcohol having a condensed ring group, in which at least one hydrogen atom is a heavy hydrogen atom, composed of a norbornane ring and a C_{5-7} hydrocarbon ring, with a compound represented by a formula [2]:

$$\begin{array}{c}
R^{1} \\
C = C \\
C - X \\
O
\end{array}$$
[2]

wherein R¹ and R² respectively represent a heavy or light hydrogen atom, R³ represents a heavy or light hydrogen atom or a methyl group in which three hydrogen atoms are respectively heavy or light hydrogen atoms, and X represents a halogen atom, a hydroxyl group or an alkoxy group.

- 13. A polymer produced by polymerization of a composition comprising the compound of any one of claims 1 to 11.
- 14. The polymer of claim 13, wherein 50 % or more hydrogen atoms contained in the polymer are heavy hydrogen atoms.
- 15. An optical member comprising a region formed of a polymer of claim 13 or 14.

16. The optical member of claim 15, which gives an absorbance at 910 nm being 50 % or smaller percentage of that given by a polymer having a same structure except that all hydrogen atoms are light hydrogen atoms.